

# **E-Commerce Challenges and Solutions**

**Prof. Parizad Bhesania and Darji Urvashi Vaibhav**

The Byramjee Jeejeebhoy College of Commerce, Mumbai, Maharashtra  
bhesaniapk@gmail.com

**Abstract:** *The blast of internet business organizations has seen the development of number of the web-based organizations around the world. Shoppers these days are selected with online business trade which is extensively comfort contrasted with customary exchanges. Deniably, web-based business ventures offer more advantages, contrasting with "blocks and-mortal" customary undertakings, yet not to be missed the issues and difficulties looked by the online business endeavours. This study featured the issues and difficulties of web-based business and a bunch of proposed answers for those issues and difficulties. Among the issues are trust, status and security. For every one of the issues and difficulties, proposed arrangements are introduced*

**Keywords:** E-commerce; trust; readiness; internet business security

## **I. INTRODUCTION**

The mix of the Web and web-based business use has created another web-based air that is incredibly proficient and compelling. The achievability highlights presented by online business has quickly changing the manner by which undertakings speaking with one another, as well similarly as with buyers and states. The utilization of web-based business on miniature and little endeavours; what's more, in the help areas has a critical blow on firm execution.

The majority of the worldwide players and the biggest internet business endeavours, estimated by online income, come from the US and China. Those organizations are Amazon.com (US), JD.com (China), Dell (US) and Jia.com (China). Ventures like Alibaba Gathering (China), eBay (US) and Rakuten (Japan) give stage which permit people and independent companies to offer their labour and products on the web. In 2013, the top online business undertakings in term of gross product esteem were the Alibaba Gathering, trailed by Amazon and eBay.

Deniably, online business undertakings have offered a demonstrated number of planned benefits like better market access and reach, lower cost for dealings for the two purchasers and venders, improvement over homegrown and market productivity, as well as upgrading contribution in worldwide worth chains, however not to neglect, the issues and difficulties face by new or existing players in the areas.

## **II. LITERATURE REVIEW**

Scientists have characterized web-based business in numerous renditions. Involving the Association for Financial Participation and Improvement (OECD) variant, internet business can be characterized as: " The deal or acquisition of labour and products, directed over PC networks by techniques explicitly intended to get or putting in of requests. The labour and products are requested by those techniques; however, the instalment and a definitive conveyance of the labour and products don't need to be directed on the web. A web-based business exchange can be between ventures, families, people, government, and other public or confidential associations. To be incorporated are orders made over the web, extranet or electronic information trade. The sort is characterized by the strategy for submitting the request. To be prohibited are orders settled on by phone decisions, copy or physically composed email."

There are four sorts of web-based business; business-to-business (B2B), business-to-purchaser (B2C), shopper - to-buyer (C2C) and business-to-government (B2G). Albeit the standard examination will in general zero in on B2C without having any effect somewhere in the range of B2C and C2C, however C2C web-based business has been viewed as more well known.

**A. Business-to-business (B2B)**

B2B can be characterized as the exchange between organizations, for example, between a distributor and a retailer, or between a producer and a distributor. The absolute incentive for this area is more than \$15 trillion of every 2013, as assessed by UNCTAD.

**B. Business-to-consumer (B2C)**

B2C is the deals by "unadulterated play" online business endeavours. Estimated by both web-based purchasers and by income, China arose as the biggest worldwide market for B2C online business and the market is extending quickly, particularly in Asia and Africa. Shoppers can be reached through wide scope of channels including committed internet business sites, interpersonal organizations, publicly supporting stages, versatile applications, etc.

**C. Consumer-to-consumer (C2C)**

C2C is considered as the cutting-edge form of grouped promoting in paper or going to a public deal. It gives a stage offering possibilities to relaxed undertakings to take part in web-based business. As a general rule, C2C like eBay or Taobao covers online public deal and deals inside the internet-based networks.

**D. Business-to-government (B2G)**

The B2G managing is like B2B, then again, actually rather than business, the clients are an administration element. Illustration of this area is public e-acquisition.

**III. RESEARCH METHODOLOGY**

This study utilizes predominantly auxiliary information, which are diaries and formal reports. Ongoing scholastic diaries were chosen, going from the year 2011 to 2015. The information bases utilized are from IEEE and ScienceDirect. Google Researcher was utilized as the underlying stage to accumulate applicable articles. The items in every diary were perused, and afterward gathered. No new model or system was gotten from this review.

**IV. CHALLENGES**

**A. Trust**

The trust among merchants and purchasers assumes a significant part for any fruitful web-based business exchanges. Yoon and Occena have figured out that trust is the major issue in web-based business climate. Contrasting with customary trade, trust is more significant in web-based business since labour and products bought over the Web can't be quickly checked and furthermore due to the absence of rules and guideline in web-based business.

**B. Readiness Level**

Availability level is one more variable of the web-based business challenges. Kurnia et al. introduced a structure comprising three degrees of status which are Hierarchical Preparation (OR), Industry Preparation (IR) and Public Preparation (NR).

1) Organizational readiness level

Kurnia et al. characterized this first degree of preparation with regards to apparent advantages (PB) and saw association assets and administration (PORaG). PB is utilized to make sense of how a specific innovation is seen to be profitable to an association. In this specific situation, PB thinks about, the expenses, chances, dangers, open doors and similarity of the advancement with the current cycles, culture, existing prerequisites and framework. In the interim, PORaG is alluding to authoritative view of the assets accessibility which including monetary, innovation and HR.

2) Industry readiness level

Industry preparation means the status in supporting online business innovation reception, given the way that little and medium endeavours (SMEs) having less impact and power contrasting with bigger associations.

3) National readiness level

This level is alluding to the accessibility of administrations in a country that help the reception of online business advancements.

**C. E-commerce Security**

Online business security has similar issues with digital protection. The aspects can be sorted as underneath:

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- 1) Integrity –ensuring the information or data are not adjusted or altered by any unapproved people and not utilizing them without clients' authorization.
- 2) Non-repudiation –ensuring not denying any deal or buy.
- 3) Authentication –ensuring that main approved people are permitted to logon to framework.
- 4) Confidentiality –touchy information and data are scrambled and not effortlessly broken.
- 5) Privacy –the capacity to deal with the term under which private data is obtained and utilized.
- 6) Availability –the product framework is consistently accessible and the equipment supplies are working appropriately, and on account of catastrophe, the framework can recuperate rapidly.

As per Ladan, internet business security systems managing two central concerns: safeguarding the business network trustworthiness and the interior frameworks, and achieving secure exchanges between the client and the dealer.

## **V. PROPOSED SOLUTIONS**

### **A. Trust Solutions**

Noor et al. proposed a trust system for social trade which comprising of Value, Convenience, Security, Protection, Web composition and E-informal. The review that spotlights on S-trade which is likewise pertinent for Internet business since it's a subset of Internet business.

As indicated by the specialists, handiness is how much client perceives the trade site to be advantageous and the client's choice and discernment to the deal are impacted by this component. The following component that impacts the web-based trust is convenience.

Yoon and Occena expressed that a remarkable endeavour should be made to further develop the site quality and upgrade the outsider acknowledgment (TPR). Involving orientation and progress in years as the control factors, their exploration is to research the confidence in C2C online business. More youthful ages are impacted by the nature of a web-based business site that impact them to turn out to be truly online buyers. Online business endeavours ought to emerge with an alternate technique to cater for various objective of shopper's age. For the TPR, Online business sites have choices to utilize outsider certified endorsements like TRUSTe or BBBOnline for embracing the protection seals since clients consider them significant and are bound to give individual data over the Web. For the undertakings focusing on shoppers more than 40 years of age, the trust can be laid out by giving networks that let purchasers to give input since the clients' criticism and remarks can impact different clients. Different specialists concur that suggestion from family or companions or verbal exchange are viewed as a successful variable on standing and trust.

That's what zhang expressed, the trust factors for online business can be estimated as; thing as portrayed in the site, administration way, and transportation season of the items or administrations. Involving Taobao.com as the model for the review, the specialist referenced the shortcomings existing in the Taobao rating framework. Taobao.com is the China's biggest C2C online commercial centre where 90% of the exchanges comes from China. In 2011, the absolute deals are around 600 billion Yuan. Since practically all C2C endeavours in China has been embracing a similar trust model like Taobao, the specialist has proposed a couple of countermeasures; exchange cost weight, time lessening coefficient, and trust factors weighted to conquer the drawbacks of Taobao embraced trust models.

### **B. Readiness Solution**

To support ventures, particularly SMEs, to take on internet business innovations, the joint effort between industry accomplices and the public authority ought to occur. The public authority and industry accomplices need to assist SMEs with building and keep up with their designs, homegrown hierarchical assets and administration to fit well with internet business advances.

The obligations of policymakers additionally assume a significant part. To build the familiarity with industry principles and designs ought to be taken by the policymakers. Moreover, mechanical assets, human and monetary ought to be given to work with the reception of internet business advancements.

### **C. Security Solution**

Ladan worried that each online business framework ought to have safety efforts since it is one of the main highlights for online business. Safety efforts ought to be applied at all levels that including business applications, the venture interior

organizations, front-end clients and servers, and furthermore information and data connections. The establishment and design of firewalls and the execution of DMZ in the venture's organizations ought to forestall unapproved access. Moreover, security can be upgraded further by network, areas of strength for isolation encryption, and interruption location framework (IDS) establishment and design.

In the interim, Matbouli and Gao have recognized five safety efforts to limit the danger forces by web-based business security. The actions are:

- 1) Schooling - the mindfulness and information among the customers in regards to the web-based business security ought to be thought about.
- 2) Secure Attachment Layer (SSL) - the utilization of public key encryption in SSL guarantees the classification, information honesty, validation, and non-renouncement.
- 3) Individual Distinguishing proof Number (PIN) - the utilization of email callbacks to affirm every exchange.
- 4) Individual Firewalls - having a firewall is essential to assist with safeguarding a PC
- 5) Security Strategy - having an unmistakable security strategy is vital stage to get an online business venture.

## VI. CONCLUSION

As the computerized economy is growing quickly and influencing more undertakings exercises, it means a lot to think about the proposed answers for the referenced issues and difficulties of web-based business. Despite the fact that internet business ventures could be from any sorts, essentially, they share the normal issues and difficulties.

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